

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	Fi	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/920,227	08/01/2001		Laura J. Ball	SP01-193	5308	
22928	7590	10/21/2003		EXAMINER		
CORNING SP-TI-3-1	INCORP	ORATED	VINCENT, SEAN E			
CORNING,	NY 1483	31	ART UNIT	PAPER NUMBER		
·				1731		

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

هـه.	•			1.				
		Application No.	Applicant(s)	W.				
		09/920,227	BALL ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Sean E Vincent	1731					
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet	with the correspondence ac	Idress				
THE I - Externanter - If the - If NO - Failur - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may within the statutory minimum of vill apply and will expire SIX (6) No. cause the application to become	y a reply be timely filed thirty (30) days will be considered timel MONTHS from the mailing date of this case ABANDONED (35 U.S.C. § 133).					
1)⊠	Responsive to communication(s) filed on 02 S	September 2003 .						
2a) <u></u> ☐	This action is FINAL . 2b)⊠ Th	is action is non-final.						
3) Dispositi	Since this application is in condition for allowa closed in accordance with the practice under ton of Claims			ne merits is				
· _	Claim(s) <u>1-23</u> is/are pending in the application							
-	4a) Of the above claim(s) <u>16-23</u> is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
	Claim(s) <u>1-15</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/or	r election requirement.						
Applicati	on Papers							
9)□ .	The specification is objected to by the Examine	r.		·				
10) 🗌 -	The drawing(s) filed on is/are: a)□ accep	eted or b) objected to b	y the Examiner.					
	Applicant may not request that any objection to the	= : :	• • • • • • • • • • • • • • • • • • • •					
11)[_]	The proposed drawing correction filed on		disapproved by the Examin	er.				
40\□ -	If approved, corrected drawings are required in rep							
-	The oath or declaration is objected to by the Exa	aminer.						
	inder 35 U.S.C. §§ 119 and 120							
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.	C. § 119(a)-(d) or (f).					
a)L	☐ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents							
	2. Certified copies of the priority documents							
	3. Copies of the certified copies of the prior application from the International Bursee the attached detailed Office action for a list of the control of	eau (PCT Rule 17.2(a)).	Stage				
14)□ A	cknowledgment is made of a claim for domestic	priority under 35 U.S.	C. § 119(e) (to a provisional	l application).				
_	☐ The translation of the foreign language procedure. Acknowledgment is made of a claim for domesting. The translation of the foreign language procedure. The translation is the foreign language procedure. The translati	• •						
Attachment	r(s)							
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> .	5) Notice	ew Summary (PTO-413) Paper No of Informal Patent Application (PT					

Application/Control Number: 09/920,227

Art Unit: 1731

DETAILED ACTION

Page 2

Election/Restrictions

1. Applicant's election without traverse of claims 1-15 in Paper No. 6 is acknowledged.

Claims 16-23 are hereby withdrawn from consideration.

Claim Objections

Applicant is advised that should claim 4 be found allowable, claim 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Likewise, claim 14 is a substantial duplicate of claim 5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 2 and 4-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Le Sergent (US 5,194,714). Le Sergent teaches at col. 2, lines 35-62:

"As shown in FIG. 1, a piping means 1 is used to introduce <u>silicon</u> <u>tetrachloride</u> into an evaporator 2, kept at a temperature as constant as possible. The vaporized silicon tetrachloride passes through a heater 3, then through a flow controller 4 and a piping means 4A. At the same time, a

Application/Control Number: 09/920,227

Art Unit: 1731

fluorine-containing gas such as <u>dichlorodifluoromethane</u>, issuing from a bottle 5, flows via a a pressure controller 6 and a flow controller 7 to a piping means 10 joining with the silicon tetrachloride gas feed piping means 4A and likewise a stream of oxygen arriving via a piping means 8 and a flow controller 9. The reagent gases are heated in a heater 11, then flow via the piping means 12 to the injector 12A <u>bringing the reagent gases into contact with the plasma and the mandrel to be coated with a layer of fluorine-doped silica.</u>

Also, a plasmagene gas, such as oxygen, nitrogen or argon, is introduced into a torch 13 the end whereof is surrounded by a coil 14 supplied with *high-frequency* current by the generator 15. The ionized gas plasma at high temperature forms a jet 16 that impinges on the periphery of the mandrel 17. The latter rotates about its axis and is driven by a rig 18 in smooth translation in a direction perpendicular to the plasma and reagent gas deliveries. The mandrel, the torch and the reagent gases injector are arranged in a *closed chamber 19 connected on the one hand to a dry air delivery nozzle* 20 and on the other hand to a residual gas discharge pipe 21, connected to an exhaust gases cleaning installation. "

At col. 3, lines 31-38, Le Sergent teaches:

"Such an air processing line allows air with <u>a residual water vapor</u> content not exceeding one part per million by volume to be obtained. The invention accordingly makes it possible to effect silica deposits, either doped or not, with hydroxyl ion concentrations of less than 1 ppm and typically of the order of 0.1 ppm, usable for the manufacture of optical fibers with very low linear attenuation coefficients. "(emphasis added)

5. Claim 3 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Guerder et al (US 4,367,013). The abstract of Guerder et al teaches:

"A process is described for making a doped-silica ingot useful in the manufacture of optical fibers. At least a <u>silicon compound and a titanium</u> compound are decomposed in the flame of the induction plasma burner in the presence of a determined supply of hydrogen and are reacted with the oxygen contained in the burner feed gas and/or in the vector gas to form SiO.sub.2 and H.sub.2 O against a heat-stable support. As a result silica and titanium oxide are deposited on the support in the form of a homogeneous vitreous mass exhibiting a selected concentration of hydroxyl groups between 10 and 50 parts per million. Fluorine-doped silica is deposited radially in the same way on the resulting ingot. The resulting semifinished product is a cylinder

Art Unit: 1731

consisting of a titanium-doped silica core, whose TiO.sub.2 concentration by weight is about 0.1 to 8%, covered by a sheath of fluorine-doped silica, whose fluorine concentration is about 0.1 to 3%. "(emphasis added)

Conclusion

- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E Vincent whose telephone number is 703-305-3607. The examiner can normally be reached on M F (8:30 6:00).
- 7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
- 8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Sean E Vincent Primary Examiner Art Unit 1731 Page 4

S Vincent